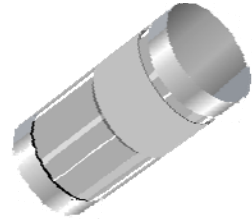


## 500mW Surface Mount Zener Diodes

### Features

- Planar Die Construction
- 500mW Power Dissipation
- Very Sharp Reverse Characteristic
- Very High Stability
- Low Reverse Current Level
- Standard Zener Voltage Tolerance is  $\pm 5\%$
- Ideally Suited for Automated Assembly Processes
- RoHS Compliant



MiniMelf



### Mechanical Data

<b>Case:</b>	Molded Glass MiniMelf
<b>Terminals:</b>	Solderable per MIL-STD-202E, Method 208
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	Approx. 0.03 grams

### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
<b>P<sub>D</sub></b>	Power Dissipation at $T_a=25^{\circ}C$	500	mW	
<b>V<sub>F</sub></b>	Forward Voltage	1.1	V	$I_F=200mA$
<b>R<sub>thJA</sub></b>	Thermal Resistance Junction to Ambient	0.3	K/mW	
<b>T<sub>J</sub></b>	Junction Temperature	175	$^{\circ}C$	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to +175	$^{\circ}C$	

**Note:** Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

# 500mW Surface Mount Zener Diodes

## ZMM5221B - ZMM5267B

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		VZ @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μA	VR (V)
ZMM5221B	5221	2.4	2.28	2.52	20.0	30.0	1200	0.25	100	1.0
ZMM5222B	5222	2.5	2.38	2.63	20.0	30.0	1200	0.25	100	1.0
ZMM5223B	5223	2.7	2.57	2.84	20.0	30.0	1300	0.25	75	1.0
ZMM5224B	5224	2.8	2.66	2.94	20.0	30.0	1400	0.25	75	1.0
ZMM5225B	5225	3.0	2.85	3.15	20.0	29.0	1600	0.25	50	1.0
ZMM5226B	5226	3.3	3.14	3.47	20.0	28.0	1600	0.25	25	1.0
ZMM5227B	5227	3.6	3.42	3.78	20.0	24.0	1700	0.25	15	1.0
ZMM5228B	5228	3.9	3.71	4.10	20.0	23.0	1900	0.25	10	1.0
ZMM5229B	5229	4.3	4.09	4.52	20.0	22.0	2000	0.25	5.0	1.0
ZMM5230B	5230	4.7	4.47	4.94	20.0	19.0	1900	0.25	5.0	2.0
ZMM5231B	5231	5.1	4.85	5.36	20.0	17.0	1600	0.25	5.0	2.0
ZMM5232B	5232	5.6	5.32	5.88	20.0	11.0	1600	0.25	5.0	3.0
ZMM5233B	5233	6.0	5.70	6.30	20.0	7.0	1600	0.25	5.0	3.5
ZMM5234B	5234	6.2	5.89	6.51	20.0	7.0	1000	0.25	5.0	4.0
ZMM5235B	5235	6.8	6.46	7.14	20.0	5.0	750	0.25	3.0	5.0
ZMM5236B	5236	7.5	7.13	7.88	20.0	6.0	500	0.25	3.0	6.0
ZMM5237B	5237	8.2	7.79	8.61	20.0	8.0	500	0.25	3.0	6.5
ZMM5238B	5238	8.7	8.27	9.14	20.0	8.0	600	0.25	3.0	6.5
ZMM5239B	5239	9.1	8.65	9.56	20.0	10.0	600	0.25	3.0	7.0
ZMM5240B	5240	10	9.50	10.50	20.0	17.0	600	0.25	3.0	8.0
ZMM5241B	5241	11	10.45	11.55	20.0	22.0	600	0.25	2.0	8.4
ZMM5242B	5242	12	11.40	12.60	20.0	30.0	600	0.25	1.0	9.1
ZMM5243B	5243	13	12.35	13.65	9.5	13.0	600	0.25	0.5	9.9
ZMM5244B	5244	14	13.30	14.70	9.0	15.0	600	0.25	0.1	10.0
ZMM5245B	5245	15	14.25	15.75	8.5	16.0	600	0.25	0.1	11.0
ZMM5246B	5246	16	15.20	16.80	7.8	17.0	600	0.25	0.1	12.0
ZMM5247B	5247	17	16.15	17.85	7.4	19.0	600	0.25	0.1	13.0
ZMM5248B	5248	18	17.10	18.90	7.0	21.0	600	0.25	0.1	14.0
ZMM5249B	5249	19	18.05	19.95	6.6	23.0	600	0.25	0.1	14.0
ZMM5250B	5250	20	19.00	21.00	6.2	25.0	600	0.25	0.1	15.0
ZMM5251B	5251	22	20.90	23.10	5.6	29.0	600	0.25	0.1	17.0

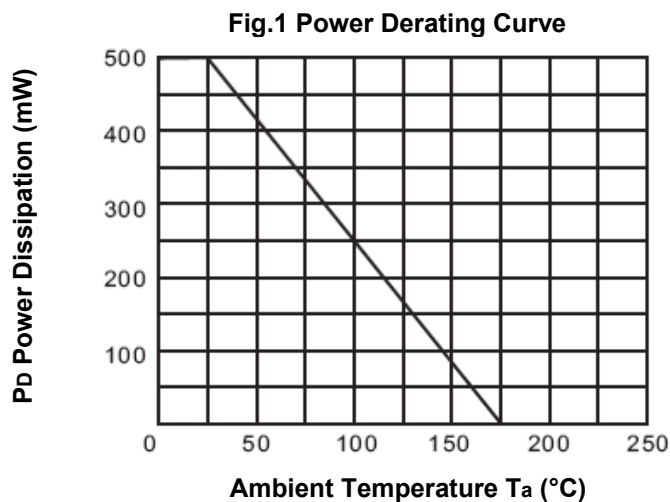
# 500mW Surface Mount Zener Diodes

## ZMM5221B - ZMM5267B

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		Vz @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μA	VR (V)
ZMM5252B	5252	24	22.80	25.20	5.2	33.0	600	0.25	0.1	18.0
ZMM5253B	5253	25	23.75	26.25	5.0	35.0	600	0.25	0.1	19.0
ZMM5254B	5254	27	25.65	28.35	4.6	41.0	600	0.25	0.1	21.0
ZMM5255B	5255	28	26.60	29.40	4.5	44.0	600	0.25	0.1	21.0
ZMM5256B	5256	30	28.50	31.50	4.2	49.0	600	0.25	0.1	23.0
ZMM5257B	5257	33	31.35	34.65	3.8	58.0	700	0.25	0.1	25.0
ZMM5258B	5258	36	34.20	37.80	3.4	70.0	700	0.25	0.1	27.0
ZMM5259B	5259	39	37.05	40.95	3.2	80.0	800	0.25	0.1	30.0
ZMM5260B	5260	43	40.85	45.15	3.0	93.0	900	0.25	0.1	33.0
ZMM5261B	5261	47	44.65	49.35	2.7	105.0	1000	0.25	0.1	36.0
ZMM5262B	5262	51	48.45	53.55	2.5	125.0	1100	0.25	0.1	39.0
ZMM5263B	5263	56	53.20	58.80	2.2	150.0	1300	0.25	0.1	43.0
ZMM5264B	5264	60	57.00	63.00	2.1	170.0	1400	0.25	0.1	46.0
ZMM5265B	5265	62	58.90	65.10	2.0	185.0	1400	0.25	0.1	47.0
ZMM5266B	5266	68	64.60	71.40	1.8	230.0	1600	0.25	0.1	52.0
ZMM5267B	5267	75	71.25	78.75	1.7	270.0	1700	0.25	0.1	56.0

**Note:** Marking code is available in 2008.

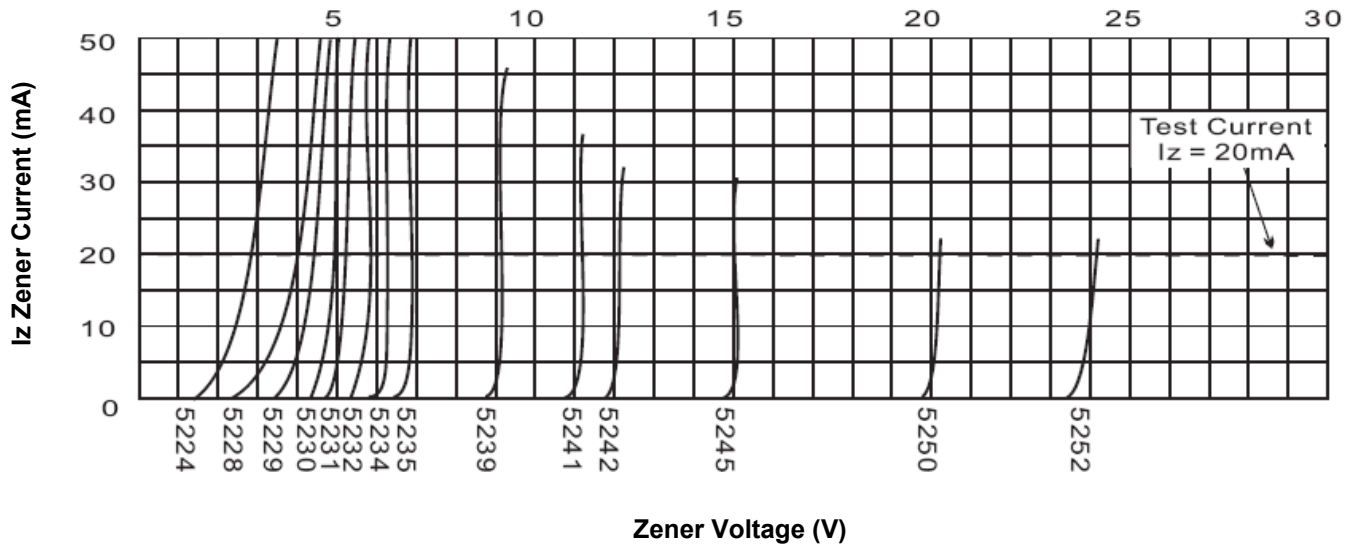
### Characteristics Curves



# 500mW Surface Mount Zener Diodes

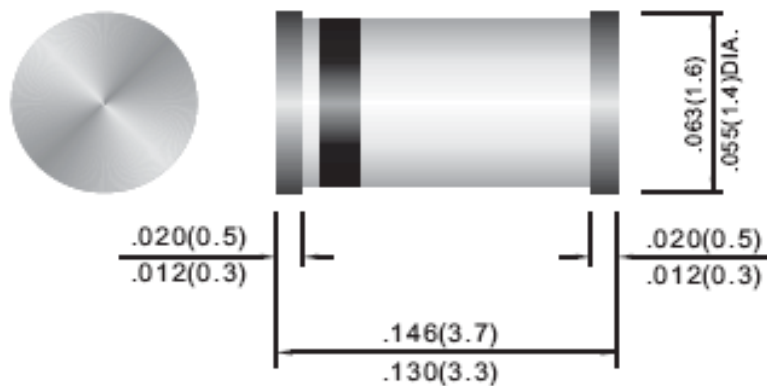
## ZMM5221B - ZMM5267B

Fig.2 Breakdown Characteristics



### Dimensions in inches (mm)

#### MiniMelf



# 500mW Surface Mount Zener Diodes

## ZMM5221B - ZMM5267B

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